33748 \$/021/62/000/002/002/010 D299/D304

On improving the estimate ...

Various estimates were obtained which are mentioned in the references for the method of fastest diminishing. Thus, M. Sh. Birman (Ref. 3: UMN, 5, (1950)) obtained the estimate

$$\|\bar{x} - x_n^{(p)}\| \leq C \left[\frac{1}{T_p\left(\frac{M+m}{M-m}\right)}\right]^n$$
 (4)

where  $T_p(t)$  is a Chebyshev polynomial of degree p. B. A. Samokish (Ref. 4: UMN, 12, 238, (1957)) obtained another estimate by assuming that the point M is an isolated point of the spectrum of the operator A and that the interval  $[m,M_1]$ , containing the remaining spectrum, is known. In some particular cases, the latter estimate is better than (4). It is shown that estimate (4) can be improved without using additional information on the spectrum of the operator. Theorem: In solving Eq. (1) by the method of fastest diminish-Card 2/4

33748 S/021/62/000/002/002/010 D299/D304

On improving the estimate ...

ing, the error of the approximate solution  $x_n^{(p)}$  has the estimate

$$\|\bar{\mathbf{x}} - \mathbf{x}_{n}^{(p)}\| \leq C \left[ \left( \frac{1 - \sqrt{\alpha}}{1 + \sqrt{\alpha}} \right)^{p} \right]^{n}$$
 (5)

where

$$C = \frac{\|Ax_0 - y\|}{m}$$
,  $A = \frac{m}{M}$ ,  $p \geqslant 2$ 

The proof of the theorem is based on the construction of the iterative process

$$x_{n} = \frac{1}{\sigma} \sum_{i=1}^{2} \left[ a_{i} x_{n-i} + \varphi_{i}(A) (Ax_{n-i} - y) \right]$$
 (6)

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On improving the estimate ,...

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with parameters  $a_i$  and functions  $\varphi_i$ , so that the sequence  $\{x_n\}$  converges to the solution of Eq. (1) with the speed of a (given) geometrical progression. The sequence of approximate solutions  $\{x_n\}$  obtained by Formula (6), is a majorant for the sequence  $\{x_n^{(p)}\}$ , calculated by the method of fastest diminishing. It is shown that estimate (5) is better than (4). It is noted that for p=1, the iterative method (6) gives faster convergence than the method of fastest diminishing. There are 5 Soviet-bloc references.

ASSOCIATION: Uzhhorods'kyy derzhavnyy universytet (Uzhhorod State University)

PRESENTED: by Academician Y. Z. Shtokolo of the AS UkrRSR

SUBMITTED: June 20, 1961

Card 4/4

16.6500

5/044/62/000/006/086/127 B166/B112

AUTHOR:

Buledza, A. V.

TITLE:

A method of constructing iterative processes for the solution

of a system of linear algebraic equations

PERIODICAL: Referativnyy zhurnal. Matematika, no. 6, 1962, 35, abstract

6V164 (Visnik Kiivs'k. un-tu, no. 3, 1960 (1961), ser.

matem. ta mekhan., no. I, 132-138)

TEXT: A system AX = f of linear algebraic equations with a positive definite symmetric matrix A, the eigenvalues  $\varrho$  of which satisfy the inequality  $0 < m = \varrho_{\min} \le \varrho \le \varrho_{\max} = M$ , is solved by an iterative method defined by the formula

$$X_{m} = \sum_{i=1}^{2} [a_{i}X_{m-i} + b_{i} (AX_{m-i} - f)].$$

It is well known (RZhMat, 1960, 3516) that for the existence of the limit

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A method of constructing ...

lim  $X_m = X$  for arbitrary f,  $X_0$ , and  $X_1$  it is necessary and sufficient that  $m \to \infty$   $a_1 + a_2 = 1$  and that the roots of the equation  $\lambda^2 - \sum_{i=1}^{2} (a_i + b_i \varrho) \lambda^{2-i} = 0$ 

be less than 1 for all values of QE[m, M] as regards their absolute value. When  $a_2=a$  and  $a_1=1-a$ , the roots  $\lambda$  become functions of the parameters a,  $b_1$ , and  $b_2$  and of the eigenvalues Q of matrix A. In so far as  $|\lambda|$  reaches a maximum at the ends of the interval [m, M], it is sufficient to study  $|\lambda|_{Q=m}$  and  $|\lambda|_{Q=M}$ . The selection of the parameters a,  $b_1$ ,  $b_2$  ensuring fulfilment of the condition  $\max_{M \leq Q \leq M} |\lambda| < 1$  is given in the form of a table consisting of seven schemes (schemes I - VII). It is shown that, if the initial approximation  $X_0$ ,  $X_1$  is far from being the accurate solution, the selection of parameters according to schemes IV - VII can be reduced to a slowly converging process of iteration. Therefore, instructions for the practical application of the calculation schemes are given (the calculations should be commenced by using one of schemes I - III, and

A method of constructing ...

S/044/62/000/006/086/127 B166/B112

then, after a given accuracy has been achieved, one can go over to one of schemes IV - VII in order to accelerate the convergence. [Abstracter's note: Complete translation.]

10

Card 3/3

# BULEDZA, A.V.

Remark on an operator polynomial. Fokl. 1 soob. UzhGU. Ser. fiz.-mat. i ist. nauk no.5x89 '62.

Stability of algorithms of successive approximations. Ibid.:90-92

Use of the method of straight lines in solving certain boundary value problems for Poisson's equation. Ibid,:92-96 (MIRA 17:9)

BULEDZA, A.V.

Difference methods for solving boundary value problems for elliptic differential equations. Dif. urav. 1 no.5:687-691 My '65.

(MIRA 18:7)

1. Uzhgorodskiy gosudarstvennyy universitet.

DOLYA, V. (g.Rezekne); VLASOV, A. (g.Sverdlovsk); BULEGA, F. (s.Kurashevtsy, Vinnitskaya obl.); MIRONOV, Ye. (sovkhoz Neyelovo, Smolenskaya obl.); VOLKOV, V. (s.Kazanka, Nikolayevskoy oblasti); BRUDKIN, A. (Khabarovskiy kray)

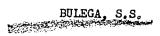
Suggestions of the wire broadcasting workers. Radio no.2:49-50 f.62. (MIRA 15:1)

BULEGA, S.

Automatic fog-signal apparatus. Mor. i rech.flot 14 no.11:29-30
N 154.

(Fog signals)

(Fog signals)



Equipment for the automatic control of the insulation of marine alternating current networks. Inform. sbor. TSNIIMF no.81: Tekh. ekspl. mor. flota no.17:52-59 '62.

(MIRA 16:6) (Electricity on ships)
(Electric insulators and insulation)

(Automatic control)

ACC NR: AR6019858 (N) SOURCE CODE: UR/0398/66/000/001/V011/V011

AUTHOR: Bulega, S. S.

TITLE: Effect of alternating current network voltage on the operation of shipboard instruments for automatic insulation monitoring, based on the principle of imposition of a constantly operative current

SOURCE: Ref. zh. Vodnyy transport, Abs. 1V67

REF SOURCE: Inform. sb. Tsentr. n.-i. in-t morsk. flota, vyp. 131, 1965, 37-49

TOPIC TAGS: electric engineering, electric equipment, automation equipment, automatic control equipment, electric protective equipment, electric distribution equipment, ship component, cargo ship, ELECTRIC INSULATION

ABSTRACT: The result of tests made with an experimental shipment of AKSI-1 instruments for automatically monitoring the insulation of shipboard AC networks was observation of a deviation in settings for activating the signal system when shifting from one voltage to another in the network being monitored. Certain design changes were made in the measuring instruments in order to eliminate this fault, but these changes in no way disturbed the instrument's basic technical characteristics. The AKSI-1 is designed for monitoring the insulation of ungrounded AC networks for three voltage ratings, 127, 220, and 380, and is based on the principle of imposition of a constantly operative current on the network which is being monitored. The voltage between

Card 1/2 UDC: 629.12:621.311

ACC NR: AR6019858

ground and AC network phases, causing current to flow between them, should have no noticeable effect on the operation of instruments of this type. An electromagnetic relay, a magnetic amplifier, a relaxation oscillator, and other units, can be selected for use as the sensitive element which is to react to the magnitude of the operative current (the relaxation oscillator was selected for use in the AKSI-1). When the internal resistance of the meter (Ro) is constant, the operative current can be determined simply by the magnitude of the insulation resistance, so the magnitude of the voltage drop  $(v_0)$  across the resistance  $(R_0)$ , occasioned by the flow of the operative current, can serve as a measure of the insulation resistance ( $R_{in}$ ). The operation of the relaxation oscillator is selected such that when there is a change in insulation resistance there is excitation (interruption) of oscillator oscillations, the pulses from which cut in (cut out) the signal system after conversion. The instrument was improved and then tested at deviations in network supply voltages of up to 10% of rated, both when a 220 volt 50 cycle AC source was present and missing in the instrument's measuring circuit. The result was the compilation of tabular data for measurements of insulation resistance for 5 settings, during which operation (and non-operation) of the instrument was observed, as was the maximum value for the error in instrument operation ( $\Delta Ry\%$ ) and the return factor,  $K_r = R_{\rm in} \ {\rm av/R_{out}} \ {\rm av}$  error was not more than 5% for the minimum setting of 20 kohms, and 2.5% for the maximum setting of 200 kohms. One of the AKSI-l instruments is presently in experimental use aboard the diesel-electric drive ship Angarges. 6 figures. Bibliography of 2 titles. V. Makarov. [Translation of abstract]

SUB CODE: 09, 13

Card 2/2

TRUSHLYAKOV, V.P.; BEREZHINSKIY, A.I.; SPIVAK, M.Ya.; FINOGEYEV, I.A.;
LIPETS, A.U.; AYZEN, B.G.; KOSTOVETSKIY, D.L.; BOLDZHI, K.I.;
YAMPOL'SKIY, S.L.; FEDOTOV, D.K.; KIRILLOV, I.I.; OSHEROV, S.Ya.;
TYSIN, V.A.; OGLOBLIN, G.A.; KANAYEV, A.A.; BULEGA, S.S.;
BORUKHMAN, V.A.; IOEL'SON, V.I.

#### "APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000307430003-1

ACC NR: AR6019858

(N)

SOURCE CODE: UR/0398/66/000/001/V011/V011

AUTHOR: Bulega, S. S.

TITLE: Effect of alternating current network voltage on the operation of shipboard instruments for automatic insulation monitoring, based on the principle of imposition of a constantly operative current

SOURCE: Ref. zh. Vodnyy transport, Abs. 1V67

REF SOURCE: Inform. sb. Tsentr. n.-i. in-t morsk. flota, vyp. 131, 1965, 37-49

TOPIC TAGS: electric engineering, electric equipment, automation equipment, automatic control equipment, electric protective equipment, electric distribution equipment, ship component, cargo ship, ELECTRIC INSULATION

ABSTRACT: The result of tests made with an experimental shipment of AKSI-1 instruments for automatically monitoring the insulation of shipboard AC networks was observation of a deviation in settings for activating the signal system when shifting from one voltage to another in the network being monitored. Certain design changes were made in the measuring instruments in order to eliminate this fault, but these changes in no way disturbed the instrument's basic technical characteristics. The AKSI-1 is designed for monitoring the insulation of ungrounded AC networks for three voltage ratings, 127, 220, and 380, and is based on the principle of imposition of a constant-lyoperative current on the network which is being monitored. The voltage between

₩ UDC: 629.12:621.311

#### ACC NR: AR6019858

ground and AC network phases, causing current to flow between them, should have no noticeable effect on the operation of instruments of this type. An electromagnetic relay, a magnetic amplifier, a relaxation oscillator, and other units, can be selected for use as the sensitive element which is to react to the magnitude of the operative current (the relaxation oscillator was selected for use in the AKSI-1). When the internal resistance of the meter  $(R_{
m o})$  is constant, the operative current can be determined simply by the magnitude of the insulation resistance, so the magnitude of the voltage drop  $(v_0)$  across the resistance  $(R_0)$ , occasioned by the flow of the operative current, can serve as a measure of the insulation resistance (Rin). The operation of the relaxation oscillator is selected such that when there is a change in insulation resistance there is excitation (interruption) of oscillator oscillations, the pulses from which cut in (cut out) the signal system after conversion. The instrument was improved and then tested at deviations in network supply voltages of up to 10% of rated, both when a 220 volt 50 cycle AC source was present and missing in the instrument's measuring circuit. The result was the compilation of tabular data for measurements of insulation resistance for 5 settings, during which operation (and non-operation) of the instrument was observed, as was the maximum value for the error in instrument operation (ARy%) and the return factor, Kr = Rin av/Rout av. error was not more than 5% for the minimum setting of 20 kohms, and 2.5% for the maximum setting of 200 kohms. One of the AKSI-1 instruments is presently in experimental use aboard the diesel-electric drive ship Angarges. 6 figures. Bibliography of 2 titles. V. Makarov. [Translation of abstract]

SUB CODE: 09, 13

Card 2/2

BULEI, Z.

How to fight piroplasmosis and skin disease.

p. 29 (Fer Bujqesine Socialiste) Vol. 11, No. 9, Sept. 1957. Tirane, Albania

SO: Monthly lndex of East European Accessions (EEA1) LC, - Vol. 7, No. 1, Jan. 1958

KEBADZE, N.I.[deceased]; Prinimal uchastive BULEISHVILI, D.A., kand. geol.-miner. nauk; TAVADZE, F.N., otv. red.; RUBINSHTEYN, M.M., kand. geol.-miner. nauk, red.; PEVZNER, G.Ye., red.; KONDRAT'YEVA, V.I., red.; BANKVITSER, A.L., red.; ASTAF'YEVA, G.A., tekhn. red.

[Natural resources of the Georgian S.S.R.] Prirodnye resursy Gruzinskol SSR. Moskva, Vol.5.[Fuel resources] Toplivnye resursy. 1963. 271 p. (MIRA 16:8)

m.+4.9

Q

Country : ALBANIA

CATEGORY : Farm Animals. Sheep

ABS. JOUR. ! RZBiol., No. 13, 1958, No. 59557

AUTHOR : Bulej, Z.

INST.

.TITLE : Advance in the Rapid Artificial Insemination

of Sheep

ORIG. PUB.: Bujqësinë socialiste, 1957, 11, No 6, 15-17

ABSTRACT : No abstract.

CARD: 1/1

ACC NR: AP7000780

SOURCE CODE: UR/0208/66/006/006/1064/1081

AUTHOR: Belotserkovskiy, O. M. (Moscow); Bulekbayev, A. (Moscow); Grudnitskiy, V. G. (Moscow)

ORG: none

TITLE: Algorithms for numerical schemes of the method of intergral relations for calculating mixed gas flows

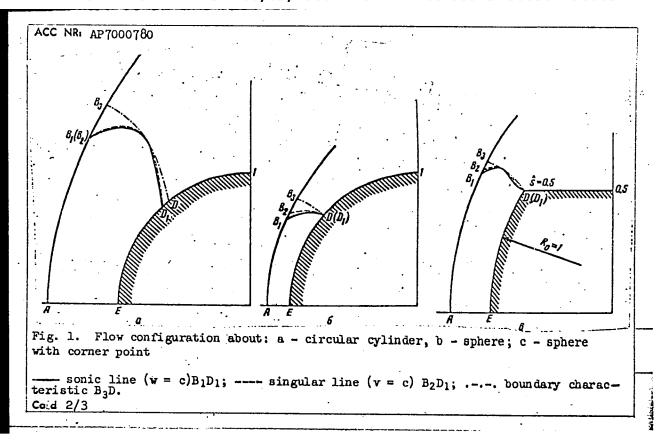
SOURCE: Zhurnal vychislitel'noy matematiki i matematicheskoy fiziki, v. 6, no. 6, 1966, 1064-1081

TOPIC TACS: supersonic aerodynamics, shock wave, equilibrium dissociation, gas dissociation, gas relaxation, approximation method, mathematic method

ABSTRACT: This article deals with the application of numerical techniques, based on the use of computers, to the solution of the direct problem of supersonic flow past blunt bodies by the method of integral relations. The problem consists of determining the single-valued and continuous solution for the region of minimum effect of bluntness with boundaries formed by the shock wave AB<sub>3</sub>, axis of symmetry AE, body contour DE, and boundary characteristic B<sub>3</sub>D (see Fig. 1). Three different schemes of the method of integral relations are outlined for which the construction of three algorithms are presented. The first one was constructed according to scheme I for supersonic flows past axisymmetric bodies with equilibrium dissociation

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UDC: 517.9:533.011



ACC NR: AP7000780

taken into account. The second was construction by considering supersonic real gas flows past blunt bodies, with nonequilibrium dissociation taken into account. The third was constructed by using double approximation according to scheme II, then integrating and approximating according to scheme I. It is said that due to the difficulties in obtaining analytical evaluations of the accuracy and convergence of the method of integral relations, the basic criterion should be numerical evaluation. To this end, calculations in various approximations were carried out according to each of the three schemes for a sphere at M = 10. The results are presented in tabular form. For comparison, the values of gasdynamic parameters of flows calculated by schemes I and II are presented in a table. The comparison shows good agreement, although an approximate representation of the functions was used in opposite directions in each of the schemes. Orig. art. has: 5 figures, 11 formulas, and 5 tables.

20.09/2/ SUB CODE: 204 SUBM DATE: 21Jen66/ ORIG REF: 005/ ATD PRESS: 5109

Card 3/3

AVROV, P.Ya.; BULEKRAYEV, Z.Ye.; DAUMOV, S.G.; KRAYEV, P.I.

Gas and oil prospects for the southeastern edge of the Caspian Depression. Vest.AN Kazakh.SSR 16 no.2:3-10 F \*60. (MIRA 13:6) (Caspian Depression—Petroleum—Geology) (Caspian Depression—Gas. Natural—Geology)

AVROV, P.Ya.; BULEKBAYEV, Z.Ye.; GARETSKIY, R.G.; DAL'YAN, I.B.; ZHURAVLEV, V.S.; MULDAKULOV, G.G.; FOMENKO, K.Ye.; SHLEZINGER, A.Ye.

Basic characteristics of the structure of the eastern and southeastern margins of the Caspian Lowland based on subsalt sediments. Geotektonika no.1:118-125 Ja-F '65. (MIRA 18:5)

1. Institut geologicheskikh nauk imeni Satpayeva AN Kazakhskoy SSR i Geologicheskiy institut AN SSSR.

BULEKBAYEV, Z.Ye.

Basic characteristics of the tectonics of the western Mugodzhar Hills region and its oil and gas potentials. Izv. AN Kazakh.

SSR Ser.geol. no.2:14-23 '62. (MIRA 15:6)

(Mugodzhar Hills region—Petroleum geology)

(Mugodzhar Hills region—Gas, Natural—Geology)

AVROV, P.Ya., <u>SULEKBAHLY</u>, a.Ye., GARETRATY, R.O., FRITYAN, J.B., ICHRENOV. V.M., TSAREV, V.A., SHIEZINGER, A.Ye., YANSHIN, A.I., Akademik

New gas-bearing region in the bral Mountain region, Pokil, AN SSSR 162 no.2:393-396 My 165. (MIRA 18:0)

i. lastitut geologicheskikh maak Ak Fazdoa; Trest "skuyuhmerter darka", Geologicheskiy institut AN 1888 i aktyibinekaya geolindan ekspeditsiya.

AVROV, P.Ya.; BULEKHAYEV, Z.Ye.; TURKOV, O.S.

Geological prerequisites of increasing the petroleum recovery from the oil fields in the Southern Emba area. Izv. AN Kazakh. SSR. Ser. geol. 22 no.4:18-22 Jl-Ag '65. (MIRA 18:9)

1. Institut geologicheskikh nauk im. K.I.Satpayeva, g. Alma-Ata, i trest "Aktyubnefterazvedka", g. Aktyubinsk.

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BulekbayleUA. L. E.

BULEKBAYEVA, L.E.

Reflex influences from receptors of the thyroid gland on arterial pressure, respiration, and the flow of lymph. Vest. AN Kazakh. SSR 13 no.10:98-103 0 57. (MIRA 10:12)

(THYROID GLAND .- INNERVATION) (REFLEXES)

BULEKBAYEUA, L.E.

EULEKRALEVA, L.E., Can Biol Sci -- (diss) "Reflex Action from Certain Endocrine Glands on Lymphatic Flow," Alma Ata, 1958, S pages (Inst of Physics. Inst of Regional Star, of Fathology.

Inst of Clynical and Experimental Surgery & Kazakh SSR).

100 copies. (KL 10-58, 119)

- 13 -

BULEKBAYEVA, L.E.

Reflex influences from testicles on the lymph flow. Vest. AN Kazakh. SSR 14 no.2:92-95 F '58. (MIRA 11:2) (TESTICLE--INNERVATION) (LYMPHATICS)

VASIL'CHENKO, R.S.; BULEKBAYEVA, L.E.; KAIPOVA, Z.N.; VASIL'YEVA, Ye.N.

Lymph circulation changes and some biochemical ingredients of lymph in passive movement of animal extremities. Izv. AN Kazakh. SSR. Ser. med. i fiziol. no.2:6-10 '59 (MIRA 13:3) (LYMPH) (EXERCISE)

BULEKBAYEVA, L.E.

Reflexes from the hemoreceptors of the pancreatic ducts affecting arterial pressure, respiration, and lymph circulation. Izv. AN Kazakh. SSR. Ser. med. i fiziol. no.2:11-15 '59 (MIRA 13:3) (REFLEXES) (PANCREAS--INNERVATION) (IYMPH)

# BULEKBAYEVA, L.E.

Reflex effects from the pancreatic ducts on arterial pressure, respiration, and lymph flow. Biul.eksp.biol.i med. 48 no.9:7-10 S '59.

(MIRA 13:1)

1. Iz laboratorii limfoobrashcheniya (zavedyuyshchiy - kand.med.nauk A.M. Beketayev) Instituta fiziologii (direktor - akademik AN Kaz SSR A.P. Polosukhin) AN Kazakhskoy SSR, Alma-Ata. Predstavlena deystvitel'nym chlenom AMN SSSR V.N. Chernigovskim.

(PANCREATIC DUCTS physiol.)

(BLOOD PRESSURE physiol.)

(RESPIRATION physiol.)

(LYMPHATIC SYSTEM physiol.)

VASIL'CHENKO, R.S.; BULEKBAYEVA, L.E.; KAIPOVA, Z.N.; VASIL'YEVA, Ye.N.

Changes in the lymph flow and some biochemical lymph components following the stimulation of the sciatic nerve and sinocarotid zone. Report No.2. Izv. AN Kazakh. SSR. Ser. med. i fiziol. no.1:3-10 '61.

(LYMPH)

(SCIATIC NERVE)

(CAROTID SINUS)

VASIL'CHENKO, R.S.; BULEKBAYEVA, L.E.; KAIPOVA, Z.N.; VASIL'YEVA, Ye.N.

Changes in the lymph flow and some biochemical lymph components following the stimulation of the vagus nerve. Report No.3. Izv. An Kazakh. SSR. Ser. med. i fiziol. no.1:11-15 '61. (MIRA 15:4) (LYMPH) (VAGUS NERVE)

VASIL'CHENKO, R.S.; BULEKBAYEVA, L.E.; KAIPOVA, Z.II.; VASIL'YEVA, Ye.N.

Mechanism of changes in the lymph circulation induced by stimulation of the mechanoreceptors of organs of the gastro-intestinal tract. Izv. AN Kazakh. SSR Ser. med. nauk no.2: 3-12'63. (MIRA 16:10) (LYMPHATICS) (ALIMENTARY CANAL — INVERVATION)

VASIL'CHENKO, R.S.; BULEKBAYEVA, L.E.; KAIPOVA, Z.N.; VASIL'YEVA, Ye.N.

Changes in the lymph circulation and some biochemical lymphatic ingredients in the stimulation of the intestinal chemoreceptors. Report No. 5. Izv. AN Kazakh. SSR. Ser. med. nauk no.1:12-14 163. (MIRA 16:10)



VASIL'CHENKO, R.S.; BULEKBAYEVA, L.E.; KAIPOVA, Z.N.; VASIL'YEVA, Ye.N.

Mechanism of the change in lymph circulation due to the stimulation of the receptors of the emunctory organs. Izv. AN Kazakh. SSR. Ser. med. nauk no.1:16-24 \*64 (MIRA 17:7)

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BULEKBAYEVA, L.E.

Reflexes from thermoreceptors of the skin and serous membranes of testicles on arterial pressure, respiration, and lymph circulation. Izv. AN Kazakh. SSR. Ser. biol. nauk 3 no.5:72-79 S-0 '65. (MIRA 18:11)

L 24735-66

ACC NR: AP6015520

SOURCE CODE: UR/0404/65/000/005/0072/0079

AUTHOR: Bulekbayeva, L. E.

50

Z

ORG: none

TITLE: Reflexes from the thermoreceptors of the skin and serous membranes of the testicles and their effect on arterial pressure, respiration, and lymph circulation

SOURCE: AN KazSSR. Izvestiya. Seriya biologicheskikh nauk, no. 5, 1965, 72-79

TOPIC TAGS: dog, blood pressure, animal physiology, oscillograph, alternating

ABSTRACT: Grown male dogs under morphine-hexenal or morphine-urethan anesthesia were used to determine the effect of reflexes induced by the action of stimuli on the thermoreceptors of the skin and tunica vaginalis of the testicles on blood pressure, respiration, and lymph circulation in the organism. Prior to the beginning of the experiments the testicular membrane was sheared, and the adjacent areas were covered with oilskin in order to prevent their stimulation. Stimuli in the forms of physiological solutions chilled to temperatures of plus three to minus two degrees, and heated to +38 to +45 degrees were applied to the skin and serous membrane of the testicles. Arterial pressure was determined in the common carotid artery by means of a manometer; respiration — by the intratracheal method; lymph circulation from the thoracic duct by means of an electromagnetic

Card 1/2

[UDC: 612.143]612.213

#### L 21735-66

ACC NR: AP6015520

recorder. In some of the experiments the biopotentials from a peripheral section of the hypogastric nerve were recorded with the help of a type MPO-2 eight-channel oscillograph and a type UBP-1-0.1 alternating current intensifier. The biopotentials were recorded on a tape moving at the rate of 2.5 centimeters a second. Seventy-four experiments were carried out. It was established that the skin and serous membrane of the testicles possess thermoreceptors which when irritated produce reflexes which affect arterial pressure, respiration, and lymph circulation; heat stimulation elicited a pressor reaction of arterial pressure, intensified respiration, and increased the rate of the lymph flow; the serous membrane was found to be more sensitive to heat than the skin; cold applied to the skin and serous membrane of the testicles produced reflexes in a similar manner. It was found also that the hypogastric nerve forms one of the afferent pathways over which the impulses from the skin of the testicles are conducted, an indication that the biopotentials of the nerve in its peripheral part are intensified as a result of thermal stimulation. Orig. art. has: 6 figures. [JPRS]

SUB CODE: 06, 09 / SUBM DATE: none / ORIG REF: 010 / OTH REF: 003

Card 2/2 119-5

BULEKOV, I.F.; KORENEV, G.S., redaktor; KHROMCHENKO, F.I., redaktor; SHLEMSKIY, I.A., tekhnicheskiy redaktor.

[Tables for controlled calculation by adding machine of the increments of rectangular coordinates] Tablitsy dlia vychisleniia prirashchenii priamougol'nykh koordinat na arifmometre. Moskva, Izd-vo geodericheskoi lit-ry. 1954. 187 p. (MIRA 8:1) (Goordinates)

BULEKOV, N.S.; IMAKOV, I.T.; CHEREMISIN, A.R.

Effect of geologic and mining engineering factors on the length of the longwall. Nauch. trudy KNIUI no.14:402-413 '64. (MIRA 18:4)

IMAKOV, I.T.; BULEKOV, N.S.; PESIN, N.Ya.

Relation of the load on the stope to the length and rate of its advancement. Nauch. trudy KNIUI no.14.413-426 '64. (MIRA 18:4)

GERT, A.P.; BULEKOV, N.S.

BULEKOV, N.S.; IMAKOV, I.T.

Ways of decreasing the degree of difficulty of waste rock disposal systems at the surface of Karaganda Basin mines, Nauch, trudy KN1UI no.14.496-502 164. (MIRA 18:4)

BULENCEA, A.

Victicultura. Pucuresti, Edicutra Agro-Silvica de Stat, 1955 685 p. (Viticulture) DA Not in DLC

SOURCE:

East European Accessions List (EEAL), LC, Vol. 5, No. 3, March 1956

KARZHEV, V.I.; KASATKIN, D.F.; BULEKOVA, Yo.A.

Uses of quinoline from the by-product coke industry. Koks i khim. no. 5:50-52 '61. (MIRA 14:4)

1. Vsesoyuznyy nauchno-issledovateliskiy institut po pererabotke nefti i gaza i polucheniyu iskusstvennogo zhidkogo topliva.

(Quinoline)

1 15630-63

ACCESSION NR. AP3000862

8/0286/63/000/002/0051/0051

AUTHOR: Bulenkov, S. Ye., Chirimanov, E. V.

15

TITLE: Helmet for diver's suit Class B 63b, 65h, 10. No. 152808

SOURCE: Byul. izobreteniy i tovarnykh znakov, no. 2, 1963, 51

TOPIC TAGS: diving suit

ABSTRACT: Helmet for a diver's suit having a single viewing glass for both eyes; its distinguishing feature is that in order to equalize the pressure in the cavity of the middle ear with the surrounding pressure when the nose is clamped with the fingers when the diver submerges, the helmet is made with two elastic recesses, symmetrically located on the front part of the helmet under the viewing glass. Orig art. has: 1 figure (see Enclosure 1) [Abstracter's note: complete translation]

Card 1/1/

# BULENKOV, T.I.

Pharmaceutical centers. Aptech. delo, Moskva 2 no.2:22-24 Mar-Apr 1953. (CIML 24:3)

1. Fellow. 2. Of the Department of Pharmacy Organization, Moscow Pharmaceutic Institute (Director -- Docent V. I. Dobrynina) of the Ministry of Public Health USSR.

BULENKOV, T.I., aspirant; DOBRYNINA, V.I., direktor, dotsent.

Norms for the evaluation of the quality of medicines prepared in pharmacies. Apt.delo 2 no.3:9-10 My-Je '53.

1. Kafedra organizatsii farmatsevticheskogo dela Moskovskogo farmatsevticheskogo instituta Ministerstva zdravookhraneniya SSSR (for Bulenkov).

2. Moskovskiy farmatsevticheskiy institut Ministerstva zdravookhraneniya SSSR (for Dobrynina).

(Drugs-Standards)

BULENKOV, T.I., aspirant; DOBRYNINA, V.I., dotsent, direktor.

Vital problems in the theory of organization of pharmacy. Apt.delo no.4: 13-14 J1-Ag \*53. (MLRA 6:8)

1. Kafedra organizatsii farmatsevticheskogo dela Moskovskogo farmatsevticheskogo instituta Ministerstva zdravookhraneniya SSSR. 2. Moskovskiy farmatsevticheskiy institut Ministerstva zdravookhraneniya SSSR (for Dobrynina).

(Pharmacy)

## BULENKOV, T. I.

"Pharmaceutical Metters in Moskovskaya Oblast (1928-1952)." Cand Pharm Sci, Moscow Pharmaceutical Inst, Moscow, 1954. (MR, 26, Nov 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (11)

SO: Sum. No. 521, 2 Jun 55

TARASENKO, M.I.; BULENKOV, T.I.; MIROLYUBOVA, S.P.

Rapid and simple method of determining lead acetate and lead in basic lead acetate (pharmacopeial preparations) in the ferm of a binary salt of potassium and lead sulfate. Shor. nauch. rab. MFI 2:133-139 159. (MIRA 14:1)

1. Kafedra neorganicheskoy khimii (zav. - dotsent M.I. Tarasenko) Moskovskogo farma kryticheskogo instituta. (LEAD ACTIATE) (LEAD.—ANALYSIS)

TARASENKO, M.I.; BULENKOV, T.I.

Simple arrangement for a rapid drying of precipitates in gravimetric determinations. Shor. nauch. rab. MFI 2:172-174 '59.

1. Kafedra neorganicheskoy khimii (zav. - dotsent M.I. Tarasenko) Moskovskogo farmatsevticheskogo instituta. (DRYING) (CHEMICAL APPARATUS)

BULENKOV, T.I.

On the history of the rise and development of microcrystalloscopic analysis. Apt. delo 9 no.6:71-75 N-D 160. (MIRA 13:12)

1. Kafedra neorganicheskoy khimii farmatsevticheskogo fakul teta
(sav. - dotsent M.I. Tarasenko) I Moskovskogo ordena Lenina meditsinskogo instituta imeni I.M. Sechenova.

(CRYSTALLOGRAPHY) (CHEMISTRY, ANALYTICAL)

TARASENKO, Mitrofan Ivanovich; MOROKHOVETS, Andrey Yevgen'yevich; IONIN, Sergey Mikhaylovich; MITSELOVSKIY, Eduard Sergeyevich; BULENKOV, Trifiliy Illarionovich; PERKOVSKAYA, G.Ye., red.; GOROKHOVA, S.S., tekhn. red.

[Laboratory work in inorganic chemistry]Praktikum po neorganicheskoi khimii. Moskva, Vysshaia shkola, 1962. 219 p.

(MIRA 15:10)

(Chemistry, Inorganic-Laboratory manuals)

BULENKOV, T.I.; STARKOVA, G.A.

Photocolorimetric determination of some 10-substituted phenothiazine [derivatives] in tablets. Med. prom. 16 no.3:31-35 Mr '62.

(MIRA 15:5)

1. Institut farmakologii i khimioterapii AMN SSSR. (PHENOTHIAZINE) (COLORIMETRY)

BULENKOV, T.I.

Separation and determination of 10-substituted phenothiazine by thin-layer chromatography of aluminum oxide. Med. prom. 17 no.9: 26-29 S'63. (MIRA 17:5)

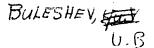
1. Nauchno-issledovatel'skiy institut farmakologii i khimioterapii AMN SSSR.

.7,

LYUKSHENKOV, A.G. [deceased]; EULENKOV, T.I.; LOGINTSEVA, G.A.

Preparation of coriander water from ethereal oil. Apt. delo 11 no.6822-23 N-D\*62 (MIRA 1787)

l. TSentral'nyy aptechnyy neuchno-issledowatel'skly institut i Institut farmakologii i khimioterapii AMN SSSR.

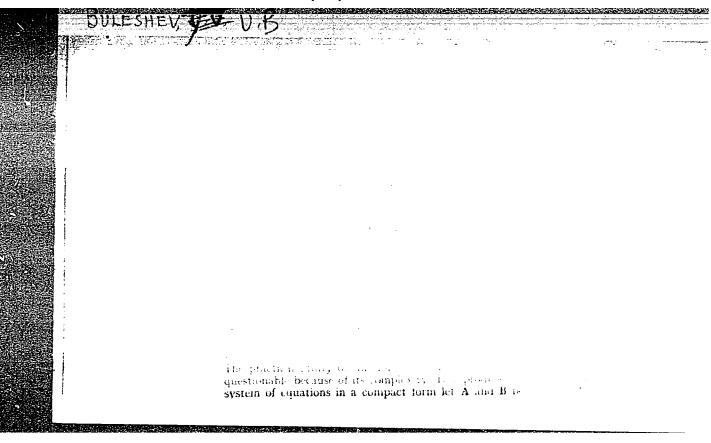


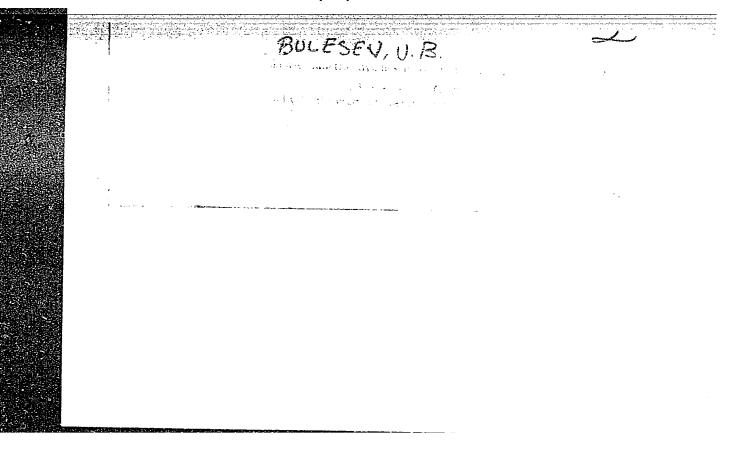
BULESHEV, U. B.

"Application of Kartan's Method of External Forms to the Theory of the Integration of Partial Differential Equations of the First and Second Order in Two Independent Variables." Cand Phys-Math Sci, Inst of Mathematics and Mechanics, Acad Uzbek SSR, Tashkent, 1954. (RZhMat, Nov 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (11)

SO: Sum. No.521, 2 Jun 55





U.S.

One generalization of the Lagrange-Sharpi method. Trudy Inst. mat. i mekh. AN Uz. SSR no.17:117-125 '56. (MLRA 10:4) (Differential equations, Partial)

LJP(e)/ESD(t)/ASD(a)-5/AFWL/AFETR/ESD(dp)/ L 9029-65 EMT(a) RAEM(t)/ASD(d) ACCESSION NR: ARAO43041 8/0044/64/000/006/B049/B049 SOURCE: Ref. zh. Matematika, Abs. 6B250 AUTHOR: Buleshev, U. B. TITIE: A method of integrating second-order equations in partial derivatives CITED SOURCE: Uch. zap. Tashkentsk. gos. ped. in-t, v. 38, 1963, 117-125 TOPIC TAGS: second order equation, partial derivative, integral second order equation, differential equation, first order partial derivative, Pfaff system TRANSLATION: It is shown that if for the equation 2 functions:  $\Phi_1$  (x,y,z,p,q,r,s,t) and  $\Phi_2$ (x,y,z,p,q,r,s,t) are found which satisfy the defined system of 2 differential equations in partial derivatives of the first order, then under the conditions  $\frac{\partial (F, \Phi_1, \Phi_2)}{\partial (F, \Phi_1, \Phi_2)} \neq 0$ ∂(r, s, 1)  $\frac{F}{F}(x, y, z, p, q, r, s, t) = 0$ 

L 9029-65 ACCESSION HR: AR40	43041			
the equation (1), a	ided with the system		0	
	$\Phi_1 = a_1, \Phi_3 = a_3,$	(2)	•	
Bystem dz - młz - ci	y integrable. In other words, tions of x, y, z, p, q, we obta ly = 0, dp - rdz - sdy = 0, dq x,y,s1. so, b, b) giving the	m a unity inte	grable Pfaff	
Shirokov	x,y,s1, s2, b1, b2) giving the	- Bdx - tdy = ( full integral	), from which we of equation (1).	
Shirokov	x,y,s <sub>1</sub> , s <sub>2</sub> , b <sub>1</sub> , b <sub>2</sub> ) giving the SUB CODE: MA	- Edx - tdy = ( full integral ENCL:	of equation (1).	
Shirokov	/ / / / / / / / / / / / / / / / / / /	full integral	of equation (1).	
Shirokov	/ / / / / / / / / / / / / / / / / / /	full integral	of equation (1).	

L 63393-65 EWT(1)/EWA(j)/EWA(b)-2 RO

ACCESSION NR: AP5023250

RU/0012/64/000/005/0825/0831

AUTHOR: Andries, A. (Doctor, Major); Bulete, I. (Engineer, Major)

TITLE: Considerations on pyridine-2-aldoxime-N-methyl methanesulfonate (P sub 8), Anew antidote in cases of intoxication with organophosphoric compounds

SOUPCE: Revista semitara militara, no. 5, 1964, 825-831

TOPIC TAGS: experiment animal, sulfur compound, methane, organic phosphorus compound, drug treatment

ARSTRACT: The authors describe the compound and an original 3-step method of preparing it, and report the results of their experimental tests on animals in the treatment and prevention of intoxication with "Sarin" and ethyl pyrophosphate. They found that the substance has a considerably greater solubility in water than the control antidote and can be administered by mouth, and that it should be an effective therapeutic agent in organophosphoric intoxications. Orig. art. Incl.: 5 tables.

1/2

ACCESSION NR: AP5023	250	the second		0
ASSOCIATION: none				
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<u>L 29760–66</u> RO	
ACC NR: AP6020891	SOURCE CODE: RU/0003/65/016/009/0450/0450
AUTHOR: Bulete, I.; Popa-Zeletin, I.	33
ORG: none	B
TITLE: Phenacyloximenervatyl chloride (CFO) with organophosphorus compounds  SOURCE: Revista de chimie, v. 16, no. 9, 19	N) as a new antidote against poisoning ·
TOPIC TAGS: antidote, organic phosphorus co	ompound, experiment animal
ABSTRACT: The authors report the synthesis nervatyl chloride (nervatyl being one of the of diethylaminoethanol). The compound was fremedies as an antidote for the experimental compounds, and did not require the addition effectiveness. [JPRS]	names for the compound, diphenyloxyacetate ound to be more effective than the standard poisoning of animals with organophosphores.
SUB CODE: 06 / SUBM DATE: none / ORIG	REF: OO1
Card 1/1 66	

BULETSA, B.A.

Topical diagnostic significance of facial nerve lesions in brain tumors; clinicoelectromyographic interpretation. Vop. neirokhir. 28 no.2:33-37 Mr-Ap '64. (MIRA 18:2)

1. Otdel nevrologii (zav. - prof. L.B. Litvak) Ukrainskogo nauchnoissledovatel'skogo psikhonevrologicheskogo instituta, Knar'kov.

## BULETSA, B.A.

Dynamics of facial nerve lesions in the early period following cerebrovascular disorders; clinical and electromyographic study.

Zhur. nevr. i psikh. vol. 64 no.5:707-711 '64. (MIRA 17:7)

1. Ukrainskiy nauchnoc-issledovatel skiy psikhonevrologicheskiy institut, Khar kov.

BULETSA, V.I.

В. И. Булеца защитил 5/1 1961 г. и Совете Черновицкого медицинского института диссертацию на тему «Эспечии менерильной водой «Сойми» больных присиной полезнью и гастритом».

Минеральная вода «Сей» заказнает противовоспалительное действие на слизистую оболочку желудка, за зауст рубцеванию язв; это подтверждается уменьшением слизи и количества не был илов в желудочном содержимом, нередким исчезновением ниши после окончания курса лечения. Полученные данные свидетельствуют
о высокой физиологической активности указанной минеральной воды при лечении
больных язвенной болезнью и гастритами.

Составила И. Н. Федорова (Москва)

Candidate of Medical Sciences

Dissertations approved by the Higher Attestation Commission in January and February of 1961. Terap. arkh. no.6:117-121 '61

15 12-1

BULETSA, V. I. Cand Med Soi -- "Treatment of ulcer and gastritis patients with 'Soymy' mineral water." Chernovtsy, 1960 (Min of Health UkSSR, Chernovtsy Med Inst). (KL, 1-61, 206)

-366-

CEHAN, Adrian, ing.; BULEU, Gheorghe, ing.

Steam molding of ceramic products in our factory. Constr Buc 14 no.676:2 22 D'62

1. Seful serviciului mecanic-sef la Fabrica "Zorile Noi" Piatra Neamt (for Cehan). 2. Seful serviciului productie de la Fabrica "Zorile Noi", Piatra Neamt (for Buleu)

ANDON YEV. V.L.; BAUM, V.A.; BAUMGARTEN, N.K.; BEREZIN, V.D.; BIRYUKOV, I.K.; BIRYUKOV, S.M.; BIOKHIN, S.I.; BOROVOY, G.A.; BULEY, M.Z.; BURAKOV, N.A.; VERTSAYZER, B.A.; VOVK, G.M.; VORMAN, B.A.; VOSHCHININ, A.P.; GALAKTIONOV, V.D., kand. tekhn. nauk; GENKIN, Ye.M.; GIL'DENBLAT, Ya.D., kand. tekhn. nauk; GINZBURG, M.M.; GLEBOV, P.S.; GODES, E.G.; GOHBACHEV, V.N.; GRZHIB, B.V.; GREKULOV, L.F., kand. s.-kh. nauk; GRODZENSKAYA, I.Ya.; DANILOV, A.G.; DMITRIYEV, I.G.; DMITRIYENKO, Yu.D.; DOBROKHOTOV, D.D.; DUBININ, L.G.; DUNDUKOV, M.D.; ZHOLIK, A.P.: ZENKEVICH, D.K.; ZIMAREV, Ye.V.; ZIMASKOV, S.V.; ZUBRIK, K.M.; KARANOV, I.F.; KNYAZEV, S.N.; KOLEGAYEV, N.M.; KOMAREVSKIY, V.T.; KOSENKO, V.P.; KORENISTOV, D.V.; KOSTROV, I.N.; KOTLYARSKIY, D.M.; KRIVSKIY, M.N.; KUZNETSOV, A.Ya.; LAGAR'KOV, N.I.; LGALOV, V.G.; LIKHACHEV, V.P.; LOGUNOV, P.I.; MATSKEVICH, K.F.; MEL'NICHENKO, K.I.; MENDELEVICH, I.R.; MIKHAYLOV, A.V., kand. tekhn. nauk; MUSIYEVA, R.N.; NATANSON, A.V.; NIKITIN, M.V.; OVES, I.S.; OGUL'NIK, G.R.; OSIPOV, A.D.; OSMER, N.A.; PETROV, V.I.; PERYSHKIN, G.A., prof.; P'YANKOVA, Ye.V.; RAPOPORT, Ya.D.; REMEZOV, N.P.; ROZANOV, M.P., kand. biol. nauk; ROCHEGOV, A.G.; RUBINCHIK, A.M.; RYBCHEVSKIY, V.S.; SADCHIKOV, A.V.; SEMENTSOV, V.A.; SIDENKO, P.M.; SINYAVSKAYA, V.T.; SITAROVA, M.N.; SOSNOVIKOV, K.S.; STAVITSKIY, Ye.A.; STOLYAROV, B.P. [deceased]; SUDZILOVSKIY, A.O.; SYRTSOVA, Ye.D., kand. tekhn. nauk; FILIPPSKIY, V.P.; KHALTURIN, A.D.; TSISHEVSKIY, P.M.; CHERKASOV, M.I.; CHERNYSHEV, A.A.; CHUSOVITIN, N.A.; SHESTOPAL, A.O.; SHEKHTER, P.A.; SHISHKO, G.A.; SHCHERBINA, I.N.; ENGEL', F.F.; YAKOBSON, A.G.; YAKUBOV, P.A., ARKHANGKL'SKIY, (Continued on next card)

ANDON'YEV. V.L... (continued) Card 2. Ye.A., retsenzent, red.; AKHUTIN, A.N., retsenzent, red.; BALASHOV, Yu.S., retsenzent, red.; BARABANOV, V.A., retsenzent, red.; RATUNER, P.D., retsenzent, red.; BORODIN, P.V., kand. tekhn. nauk, retsenzent, red.; VALUTSKIY, I.I., kand. tekhn. nauk, retsenzent, red.; GRIGOR'YEV, V.M., kand. tekhn. nauk, retsenzent, red.; GUBIN, M.F., retsenzent, red.; GUDAYEV, I.N., retsenzent, red.; YERMOLOV, A.I., kand. tekhn. nauk, retsenzent, red.; KARAULOV, B.F., retsenzent, red.; KRITSKIY, S.N., doktor tekhn. nauk, retsenzent, red.; LIKIN, V.V., retsenzent, red.; LUKIN, V.V., retsenzent, red.; LUSKIN, Z.D., retsenzent, red.; MATRIROSOV, A.Kh., retsenzent, red.; MENDELEYEV, D.M., retsenzent, red.; MENKEL', M.F., doktor tekhn. nauk, retsenzent, red.; CEREZKOV, S.S., retsenzent, red.; PETRASHEN!, P.N., retsenzent, red.; POLYAKOV, L.M., retsenzent, red.; RUMYANTSEV, A.M., retsenzent, red.; RYABCHIKOV, Ye.I., retsenzent, red.; STASKNKOV, N.G., retsenzent, red.; TAKANAYEV, P.F., retsenzent, red.; TARANOVSKIY, S.V., prof., doktor tekhn. nauk, retsenzent, red.; TIZDEL', R.R., retsenzent, red.; FKDOROV, Ye.M., retsenzent, red.; SHKYYAKOV, M.N., retsenzent, red.; SHMAKOV, M.I., retsenzent, red.; ZHUK, S.Ya. [deceased], akademik, glavnyy red.; RUSSO, G.A., kand. tekhn. nauk. red.; FILIMONOV, N.A., red.; VOLKOV, L.N., red.; GRISHIN, M.M., red.; ZHURIN, V.D., prof., doktor tekhn. nauk, red.; KOSTROV, I.N., red.; LIKHACHEV, V.P., red.; MEDVEDEV, V.M., kand. tekhn. nauk, red.; MIKHAYLOV, A.V., kand. tekhn. nauk, red.; PETROV, G.D., red.; RAZIN, N.V., red.; SOBOLEV, V.P., red.; FERINGER, B.P., red.; FREYGOFER, (Continued on next card)

ANDON'YEV, V.L... (continued) Card 3.

Ye.F., red.; TSYPLAKOV, V.D. [deceased], red.; KORABLINOV, P.N., tekhn. red.; KACHKROVSKIY, N.V., tekhn. red.;

[Volga-Don; technical account of the construction of the V.I. Ienin Volga-Don Navigation Canal, the TSimlyansk Hydroelectric Center, and irrigation systems] Volgo-Don; tekhnicheskii otchet o stroitel'-stve Volgo-Donskogo sudokhodnogo kanala immi V.I. Ienina, TSimlianskogo gidrouzla i orositel'nykh soczuzhenii, 1949-1952; v piati tomakh. Moskva, Gos. energ. izd-vo. Vol.1. [General structural descriptions] Obshchee opisanie soczuzhenii. Glav. red. S.IA. Zhuk. Red. toma M.M. Grishin. 1957. 319 p. Vol.2. [Organization of construction. Specialized operations in hydraulic engineering] Organizatsia stroitel'stva. Spetsial'nye gidrotekhnicheskie raboty.

(Continued on next card)

ANDON'YEV, V.L... (continued) Card 4.
Glav. red. S.IA. Zhuk. Red. toma I.N. Kostrov. 1958. 319 p.

1. Russia (1923- U.S.S.R.) Ministerstvo elektrostantsii. Byuro tekhnicheskogo otcheta o stroitel'stve Volgo-Dona. 2. Chlen-korrespondent Akademii nauk SSSR (for Akhutin). 3. Deystvitel'nyy chlen Akademii stroitel'stva i arkhitektury SSSR (for Grishin, Razin).

(Volga Don Canal--Hydraulic engineering)

# BULEV, VALERII

Bulev, Valerii - Khigiena na prigotvianeto na khranata v kushti. (Sofiya) Nauka i izkustvo (1951) h6 p. (Nauchno-populiarna meditsinska literatura) (Hygienic preparation of food at home)

SO: Monthly List of East European Accessions, Library of Congress, Vol. 2, No. 9, Oct. 1953, Uncl.

83791

3.500

S/124/60/000/008/007/011 A005/A001

Translation from: Referativnyy zhurnal, Mekhanika, 1960, No. 8, p. 93, # 10403

AUTHORS:

Buleyev, N. I., Marchuk, G. I.

TITLE:

THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAM On the Dynamics of Large-Scale Atmospheric Processes

PERIODICAL: Tr. In-ta fiz. atmosf. AN SSSE, 1958, No. 2, pp. 66-104

TEXT: The work was performed in 1951. The formulation and complete solution are presented of the problem of short-range forecast in the baroclinic atmosphere to a quasigeostrophic approximation. The authors follow the meteorologinsts of the Fridman-Kochin school and use the vorticity transfer equation as a starting correlation. This equation was subjected to various transformations in connection with the allowance for the quasistatic and quasigeostrophic nature of atmospheric motions of the scale considered. This equation, together with the equations of heat supply and statics, forms a system with three unknown functions, which are: the altitude of absolute topography z, the temperature T, and the vertical speed  $\mathcal T$  in the p-system. The solution of this equation system is given with respect to  $\partial z/\partial t$ ,  $\partial T/\partial t$ , and  $\mathcal T$ . It is most general in comparison with the solutions, which were established in earlier publications of

Card 1/2

On the Dynamics of Large-Scale Atmospheric Processes

S/124/60/000/008/007/011 A005/A001

I. A. Kibel' (1950) and N. I. Buleyev (1950), who made certain restrictions. In the present work, the solution is obtained by the Fourier-Bessel method and is expressed through the magnitudes of vortex advection and temperature advection integrated over the entire space with weights determined by the Green furnitions. The authors obtained these functions in analytic formulation; they are tabulated and added graphically. The working formulae obtained may be used for practical calculations in connection with the forecast of the meteorological elements with the aid of computers as well as other (graphical) methods. The detailed analysis of the formulae obtained is carried out as regards to elucidation of the significance of the individual factors affecting the variation of the pressure and formation of vertical currents at various atmospheric levels. In particular, the conditions are elucidated, which provide for the existence of a "medial level" in the atmosphere, as well as the dependence of the altitude of this level on the disturbance scale. The work has also methodical significance. The method developed by the authors can be applied also to certain other proclems in the region of hydrodynamic methods of short-range weather forecast.

S. L. Belousov

Translator's note: This is the full translation of the original Russian abstract.

Card 2/2

84612

10,2000 2615 3515 2310 2207

\$/058/60/000/009/002/004 A005/A001

5.12/0 (/236 on/y)
Translation from: Referativnyy zhurnal, Fizika, 1960, No. 9, p. 153, # 23046

AUTHOR:

Buleyev, N.I.

TITLE:

The Distribution of Velocity and Temperature in a Turbulent Fluid

Flow in a Round Pipe

PERIODICAL:

V sb.: Vopr. teploobmena. Moscow, AN SSSR, 1959, pp. 208-232

TEXT: Numerical solutions are investigated for the velocity and temperature in a fluid flow in a round pipe, when using formulae of the form

$$\xi_{M} = 1_{1}^{2} \left| \frac{\partial u}{\partial r} \right| ,$$

$$\dot{c}_{H} = 1_{2}^{2} \left| \frac{\partial u}{\partial r} \right|$$

for the coefficients of the turbulent viscosity ( $\xi_M$ ) and thermal diffusivity ( $\xi_H$ ) in the corresponding initial equations. It is shown that the turbulence scales 11 and 12 must be assumed to be depending on the dynamic parameter  $\eta=av/v$  or, which is the same, on the Re-number. A form of the functions  $l_1$  and  $l_2$  entering  $\ell_M$  and  $\ell_H$  is obtained, for which the numerical solutions

Card 1/2

84612 s/058/60/000/009/002/004

The Distribution of Velocity and Temperature in a Turbulent Fluid Flow in a Round Pipe

for the velocity and the temperature in the fluid flows with  $0 < Pr \le 10$ agree well with the experiment in a wide range of the Re-number. The two forms of approximated  $\ell_{M}$  and  $\ell_{H}$  considered in the present work can be recommended for use also for the solution of various thermophysical problems in channels of an arbitrary shape. Hereat, the generalized dynamic parameters contain the pressure gradient along the flow, the density, and the viscosity of the fluid, and the effective radius of the channel.

From author's summary

Translator's note: This is the full translation of the original Russian abstract.

Card 2/2

21(9) AUTHOR:

Buleyev, N. I.

SOY/89-6-3-17/29

TITLE:

A Numerical Method for the Solution of Two-Dimensional Diffusion Equations (Chislennyy metod resheniya dvumernykh

uravneniy diffuzii)

PERIODICAL:

Atomnaya energiya, 1959, Vol 6, Nr 3, pp 338 - 340 (USSR)

ABSTRACT:

In the investigation of stationary diffusion processes almost always the differential equation:

$$\frac{1}{r^{\alpha}} \frac{\partial}{\partial r} r^{\alpha} A \frac{\partial \varphi}{\partial r} + \frac{\partial}{\partial y} A \frac{\partial \varphi}{\partial y} - C\varphi = -F$$

must be solved, the linear limiting conditions of which read as follows:

$$m_1 \frac{\partial \phi}{\partial n} + m_2 \phi = 0$$

Card 1/3

The limiting conditions on the interfaces of two  $\mathbf{d}$  ifferent media are:

A Numerical Method for the Solution of Two-Dimensional SOV/89-6-3-17/29 Diffusion Equations

$$[\varphi] = 0,$$

$$[A \frac{\partial \varphi}{\partial n}] = 0$$

r,y denote independent variables, A, C, F, U certain, partly homogeneous functions of the variables r,y, a is 1 or 0; []denotes the difference between the functional values for both sides of the interface. n is the normal to the interface of different media. The most common method of solution is the iteration method which, however, cannot always be applied because of its weak convergence. M. V. Keldysh, I. M. Gel'fand, and O. V. Lokutsiyevskiy developed the method of matrix factorization for the solution of two-dimensional difference equations of an elliptic type. A new method is now derived - called relaxation method - which factorization and step-by-step approximation. The solutions of the equations mentioned in the beginning are given and the advantages of the new method are demonstrated by a

Card 2/3

BULEYEV, N. I.;

"Theoretical model of turbulent diffusivity in three-dimensional liquid flow."

report submitted for 3rd Intl Conf, Peaceful Uses of Atomic Energy, Geneva, 31 Aug-9 Sep 64.

L 06563-67 EWP(m)/EWI(d)/EWI(1) IJF(c) WW SOURCE CODE: UR/0294/44/004/004/0540/0551

AUTHOR: Buleyev, N. I. (Moscow); Yel'tsova, L. D. (Moscow); Biryukova, G. P. (Moscow)

ORG: None

TITLE: Calculating the temperature field of a turbulent fluid flow in the initial thermal section of a circular tube

SOURCE: Teplofizika vysokikh temperatur, v. 4, no. 4, 1966, 540-551

TOPIC TAGS: turbulent flow, fluid flow, temperature distribution

ABSTRACT: The authors calculate the temperature fields in the initial thermal stabilization section during turbulent fluid flow in an infinitely extended circular tube. Longitudinal thermal overflows through the walls of the tube and through the liquid are considered in solving the problem. Temperature fields in the fluid flow and in the wall of the tube are calculated for a wide range of variation in the Reynolds and Prantdl numbers. The thermal flux g(x) on the external surface of the tube is given assuming that the tube is heated from the outside in the middle section for a finite length of the order of 30 tube diameters. It is further assumed that the velocity field in the flow is stationary and that the physical properties of the fluid and thermal conductivity of the tube material are constant. The results of the calculations are given in a series of tables and graphs. Analysis indicates that the wall-fluid tem-

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L 06563-67

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UB CODE:	20/	SUBM	DATE:	05Jan65/	ORIG	REF:	008/	ОТН	REF:	0014			
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L 10005-67 EST(1)/ESP(s) ACC NR: AP6030652 SOURCE CODE: UR/0020/66/169/006/1296/1299

AUTHORS: Buleyev, N. I.; Petrishchev, V. S.

ORG: none

TITLE: A numerical method for solving hydrodynamics equations for planar flow

SOURCE: AN SSSR. Doklady, v. 169, no. 6, 1966, 1296-1299

TOPIC TAGS: hydrodynamics, incompressible fluid, incompressible flow, fluid flow, flow analysis

ABSTRACT: A numerical method for solving fourth-order equations of the type

 $\left(-\frac{\partial \Psi}{\partial y}\right)\frac{\partial}{\partial x}\Delta\Psi + \left(\frac{\partial \Psi}{\partial x}\right)\frac{\partial}{\partial y}\Delta\Psi = \frac{1}{\mathrm{Re}}\Delta\left(\Delta\Psi\right)$ 

is described. The given method applies for certain arbitrary but time-invariant conditions for the function  $\psi$  on the boundary of its region of definition. The method is used for computing the velocity field at the edge of a plate overflown by a viscous incompressible fluid stream. The working form of the general computation scheme is given in the six-equation system

 $Z_{ik}^{l+1} = \gamma_{1:lk} \left[ c_{1:ik} Z_{i+1:k}^{l+1} + d_{1:lk} Z_{i:k+1}^{l+1} + (F_1 \Psi)_{ik}^{l} + f_{1:lk} \right] + (B_1 \Theta)_{ik}^{l},$ 

 $Y_{ik}^{l+1} = \gamma_{2ik} \left[ c_{2ik} Y_{i+1k}^{l+1} + d_{2ik} Y_{ik+1}^{l+1} + f_{2ik} - \Phi_{ik}^{l+1} \right] + (B_2 Y)_{ik}^{l},$ 

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UDC: 532.501.34

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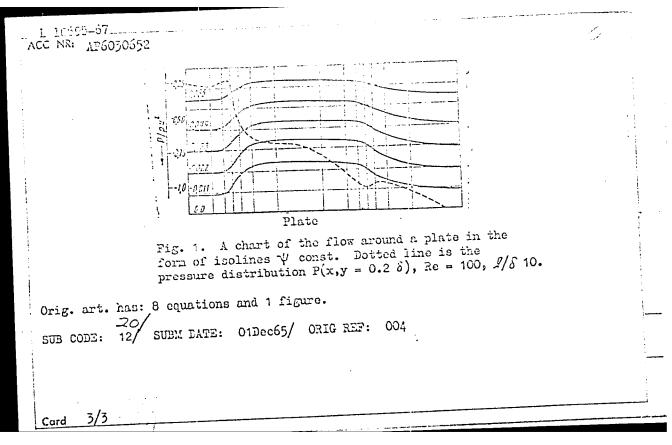
ACC NR: AP6030652

 $\begin{aligned} Y_{ik}^{l+1} &= \gamma_{2:ik} \left[ a_{2:ik} Y_{i-1:k}^{l+1} + b_{2:ik} Y_{i:k-1}^{l+1} \right] + Y_{ik}^{l-1}, \\ \gamma_{ik} &= \left[ c_{ih} + \sigma_{ik} - c_{ih} a_{i+1:k} \gamma_{i+1:k} - d_{ih} b_{i:h+i} \gamma_{i:h+i} \right]^{-1}, \quad \sigma_{ih} = 0 c_{ih}, \\ (B\Omega)_{ih} &= \gamma_{ih} \left[ d_{ih} a_{i:h+i} \gamma_{i:h+i} \Omega_{i-1:h+i} + c_{ih} b_{i+1:k} \gamma_{i+1:h} \Omega_{i+1:h-i} + \sigma_{ih} \Omega_{ih} + (\Sigma\Omega)_{ih} \right], \end{aligned}$ 

where i, k are parameters of the nodes in the computational network;  $\ell'$  is the iteration number; a, b, c, d, and e are coefficients for functions in the finite-difference statement of the corresponding differential equation. The difference equation appears as

 $-a_{ih}\Omega_{i-1,h} - c_{ih}\Omega_{i+1,h} - b_{ih}\Omega_{i,h-1} - d_{ih}\Omega_{i,h+1} + c_{ih}\Omega_{ih} = f_{ih} + (\Sigma\Omega)_{ih},$   $i = 1, 2, \dots, m; \quad k = 1, 2, \dots, n$ 

and may be regarded as the determination of  $(\sum \Omega)_{ik}$ . The authors point out several difficulties that may arise with this computational method and discuss some secondary approximations. An example is shown in Fig. 1, where the flow lines around a plate approximations. The authors thank L. A. Chudov for his attention to the work. This paper was presented by Academician G. I. Petrov on 2 December 1955.



ACC NR: AP7007561

SOUNCA CODE: U1/0050/66/000/005/U023/0039

AUTHOR: Buleyev, N. I. (Doctor of physicomathematical sciences); Vasil'yova, K. I.; Kireyeva, N. N.

ORG: Institute of Applied Geophysics (Institut prikladnoy geoficiki)

TITL: Spatial model of a forecast of the atmospheric fressure field in a quasigeostrophic approximation

SOUNCE: Meteorologiya i gidrologiya, no. 9, 1966, 23-30

TOFIC TAGS: atmospheric pressure, approximation

ABSTRACT: The article cited below describes a multi-level model for fore-casting the pressure field. It is based on a direct solution by the finite differences method. The initial equations of dynamics in a quasi-geostrophic approximation are solved. It is shown that after having the computed pressure field for any time it also is possible to obtain the field of vertical velocity related to this same time.

Dramples of forecasts are given. The results show that the forecase is better for the 300-mb surface than for the 900- and 700-mb levels.

Orig. art. has: 3 figures, 26 formulas, and 2 tables. [JPRS: 38,937]

SUB CODE: 04 / SUBM DATE: 24Dec65 / ORIG REF: 005

Card 1/1

IDC: 551.509.313

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In the light industry pavilion. Leg.prom. 18 no.10:18 0 '58.

(Industry -- Exhibitions) (MIRA 11:11)

IRGER, I.Yu.; BULEYEVA, M.A.

Machines for manufacturing artificial Persian lamb and Astrakhan. Biul.tekh.-ekon.inform. no.2:47-50 '60. (MIRA 13:6)

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Fur goods of the new selections. Kozh.-obuv.prom. 3 no.6: 39-40 Je '61. (MIRA 14:8) (Fur industry--Exhibitions)

GENINA, N.M.; BULEYEVA, M.A.; KHODOSOVA, V.N.

New technological developments in the "Light Industry" Pavilion of the Exhibition of Achievements of the National Economy of the U.S.S.R. Izv.vys.ucheb.zav.; tekh.leg.prom. no.5:133-142 '61. (MIRA 14:12)

(Moscow--Exhibitions)
(Machinery industry--Exhibitions)

Word, while Bule Meva, M.A.; KHODOSOVA, V.H.

How develor ments displayed in the "Light Industry" Pavillion, North, who versus a no.10 37-40 C Hz. (NEW 14-10)

(Moscow-Exhibitions)

(Russia Manufactures)

BULEYKO, M.D.

Exploitation of wells in fractured reservoirs. Nefteprom. delo no.4:39-40 '63. (MIRA 17:8)

buleyko, Vitaliy Borisovich; LEBEDEV, A.N., kand. tekhn. nauk, dots., rotsonzont; SMOLOV, V.B., kand. tekhn. nauk, dots., red.

[Tuned four-terminal networks and their use in computer engineering] Rezonansmye chetyrekhpoliusniki i ikh primenenie v vychislitel'noi tekhnike. Moskva, Energiia, 1964. 142 p. (Biblioteka po avtomatike, no.103) (MIRA 17:9)